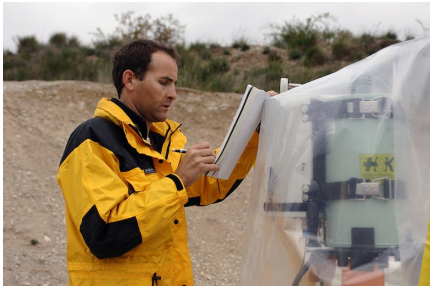
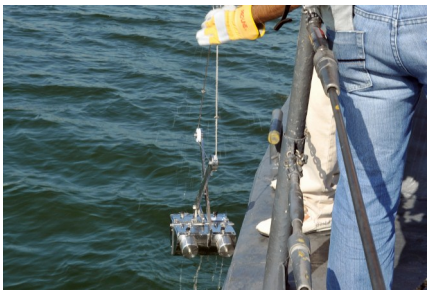
Peaceful Nuclear Cooperation

U.S. Support for NPT Article IV

UNITED STATES & THAILAND

Through the International Atomic Energy Agency (IAEA), the United States contributes to the work of many countries using nuclear materials and technology for peaceful purposes. In recent years, U.S. support has focused on achieving tangible and lasting benefits in fields that are vital to human development, including agriculture, human health, water resource management, and human resource development. Since 2000, the IAEA has approved and funded $7,235,172, including $276,820 in 2013, under its Technical Cooperation (TC) program for projects in Thailand.





In addition to the United States' longstanding support for the IAEA's activities to promote peaceful nuclear applications, at the 2010 NPT Review Conference, the United States announced a $100 million USD effort to expand this support over the next five years. The United States has pledged $50 million towards the IAEA's Peaceful Uses Initiative (PUI), focusing on human health, food security, water resource management, and nuclear power infrastructure development.

The United States views its support for peaceful uses of nuclear energy, to which all NPT Parties are entitled, as a critical part of its broader effort to strengthen the IAEA and the global nuclear nonproliferation regime. The U.S. has already designated over $22 million for IAEA projects benefitting over 120 countries, including Thailand, for which funding was previously unavailable. The United States is working with partners to reach the $100 million goal, and welcomes commitments of over $12 million from Japan, the Republic of Korea, New Zealand, the Czech Republic, Hungary, Sweden, Australia, France, Indonesia, Brazil, Italy, the UK and Kazakhstan.

NUCLEAR ENERGY

An increasing number of Member States are considering nuclear power as part of their electricity generation options, and those Member States need comprehensive and credible information on nuclear power issues such as cost and benefit, energy security and environmental impact to support their decision making.

1. *Power plant under construction. Credit: Kansai Electric Power Co.*
2. *International radiation measurement exercise. Credit: Dean Calma/IAEA*
3. *Sediment sampling for the study and control of pollutants. Credit: Dean Calma/IAEA*

Thailand recently participated in a regional TC project supported by the United States that provided comprehensive information to Member States to support their decision making regarding nuclear power planning and development.

NUCLEAR SAFETY

Thailand recently participated in a regional TC project supported by the United States to strengthen the remaining elements of its national regulatory framework for radiation safety to meet international safety standards as well as to establish a regional network of regulatory authorities to exchange information and share experiences.

HUMAN HEALTH

Thailand is participating in a project, coordinated by the IAEA's Department of Nuclear Sciences and Applications and supported by the United States, to strengthen biological dosimetry in the Asia and the Pacific region. The project aims to increase the preparedness of participating Member States to react to national and regional radiation and nuclear accidents by establishing suitable standards to monitor individuals exposed to radiation; updating existing technologies and introducing new technologies; and initiating national, regional and interregional networks on biological dosimetry which can be engaged in scenarios of mass casualties.

AGRICULTURE

Thailand is participating in a project, coordinated by the IAEA's Department of Nuclear Sciences and Applications and supported by the United States, to implement capacity building activities to improve food safety and quality through nuclear technology and networking. The project involves workshops, human resource training, and technology transfers, and

aims to establish functional networks, raise awareness of food safety and conduct food safety gap analysis in selected countries.

ENVIRONMENT

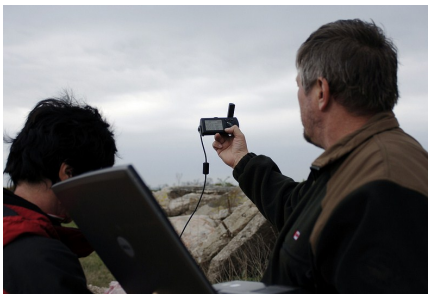
Thailand is currently participating in a regional TC project supported by the United States to evaluate the extent and possible impact of the releases of radioactivity from the Fukushima Daiichi nuclear power plant into the marine environment and make scientific assessments of the data.

HUMAN RESOURCES

To contribute to Member States' manpower development, the IAEA awards individual fellowships and organizes group training courses.

Since 2000, the United States has hosted multiple training courses that included Thai participants in fields such as nuclear safety and security, environmental remediation, insect pest control, food irradiation, radiotherapy, nuclear information processing, research reactors, and developing national long-range nuclear energy strategies. Training was also provided in the U.S. through the IAEA Fellowship Program to 52 Thai, nine of which were sponsored by the United States, in fields including sustainable energy development, food irradiation, nuclear medicine imaging, and regulatory infrastructure for nuclear and radiation safety.

Additionally, since 2000, 47 U.S. experts have traveled to Thailand to collaborate through various IAEA Technical Cooperation projects. Examples of some topics include safety, integrated management, radiation protection, inspection, isotopes, and biological activities.



1. *Water sampling in a geothermal well. Credit: Jane Gerardo-Abaya/IAEA*
2. *International radiation measurement exercise. Credit: Dean Calma/IAEA*
3. *2004 IAEA-Argonne international seminar on the implementation of comprehensive nuclear security. Credit: Argonne National Laboratory*

Through bilateral efforts, the United States has provided direct support to Member States through various collaborative projects such as the exchange of information, expert visits, and training of personnel.

In 2005, an arrangement was offered for the exchange of technical information and for cooperation in the field of peaceful uses of nuclear energy between the Office of Atomic Energy for Peace (OAEP) of Thailand and the U.S. Department of Energy (DOE).

In 2007, technical teams carried out an exploratory visit that yielded promising results for cooperation with OAEP.

In 2008, technical assistance was provided in areas such as research reactor operations, maintenance and practices, and development of national regulations for nuclear power. In 2009, DOE provided $305,000 to Thailand to assist with these activities, as well as to assist with the development of a State System of Accounting and Control. In 2010, DOE contributed $418,000.

Additionally, the International Nuclear Safeguards and Engagement Program (NSEP) has collaborated with Thailand on Additional Protocol implementation, State System of Accounting and Control (SSAC) development, research reactor operations, maintenance, and best practices, radiation protection, radioactive waste management, as well as the development of national regulations for nuclear power. In 2012, DOE provided $299,000 to assist with these activities.

Additionally, since 2000, one Thai physician has been certified in the U.S. through the American Board of Nuclear Medicine.